

# SYSTEM FOR ISSUE IDENTIFICATION, PRIORITIZATION, AND RESOLUTION AND ASSOCIATED METHOD

## FIELD OF THE INVENTION

The present invention relates to management processes and, more particularly, to a system and associated method for collaboratively identifying, prioritizing, and resolving issues.

## BACKGROUND OF THE INVENTION

Many industries produce complex systems that have long service lives and thus must be continually monitored and engineered in order to meet, for example, evolving demands of the application as well as safety and maintenance concerns. Such systems may include, for example, aircraft, rail systems, medical systems, weapon systems, certain foods and drugs, and power generation plants where the continued support of the manufacturer and/or other originating entity is not only required for the upkeep of the systems, but possibly also to abide by state, federal, and/or international regulations administered by one or more corresponding agencies or to fulfill the terms of a military contract.

Such a situation is present with, for example, commercial aircraft sold by a manufacturer thereof to an airline which uses the aircraft as a part of its fleet. These aircraft such as, for example, the Models 707, 717, 727, 747, 757, 767, MD-11, MD-80, etc. produced by The Boeing Company are extremely complex and expensive systems that face stringent scrutiny from the Federal Aviation Administration (FAA) in areas related to, for instance, safety and maintenance. However, these aircraft may sometimes experience problems that are neither safety-related nor maintenance-related and thus are not covered by a specific procedure or set of guidelines. Such "non-safety" problems

may include, for example, literature pockets experiencing yellowing and/or hazing and broken air diffusers in the lower cargo compartment. These non-safety problems require remedies, nonetheless, particularly when the problem is recurrent.

Typically, when non-safety problems occur in the aircraft, for example, the  
5 broken air diffuser, a replacement part is obtained from the manufacturer at a certain cost. If the same part continues to experience failure, a permanent remedy from the manufacturer may be requested. However, such remedies are often requested by a subordinate at a particular airline, rather than by senior management, and such requests may be submitted by the subordinate after varying numbers of incidences. In addition,  
10 the problem may not be experienced or regarded as a problem by other airlines. Thus, there is generally no consistent reference as to what constitutes an economic or otherwise significant problem that requires the attention of the manufacturer and the airlines having that model of aircraft in their fleet. Further, when a permanent remedy request is accepted by the manufacturer, the manufacturer often conducts an investigation into the  
15 root cause of the problem, rather than just the reported problem itself. Accordingly, a permanent remedy to the reported problem may sometimes encompass a much broader scope to address the root cause as well as associated problems arising therefrom.

Following the action by the manufacturer, the airlines are notified of the remedy through a service bulletin and the remedy is made available at a specified cost, which  
20 may include the cost of the investigation and the resources dedicated to determining the remedy. However, the permanent remedy may not be economically justifiable for an airline at the cost cited by the manufacturer. Therefore, an airline may simply choose to ignore the corresponding service bulletin for a variety of reasons and may be justified in doing so since the remedy is not mandated under either safety or maintenance  
25 requirements. As such, the permanent remedy may only be implemented by a few airlines having the corresponding aircraft as part of its fleet, if the remedy is implemented at all.

If the recommended remedy is not implemented by the airlines, the manufacturer realizes a loss in the manpower, time, and other resources that were dedicated to  
30 resolving the reported problem. In addition and as a consequence, the time required for the manufacturer to address other reported problems may be prolonged, which may lead

to dissatisfaction among the airlines as to the responsiveness of the manufacturer. Further, airline dissatisfaction may also result if the manufacturer provides a remedy addressing the root cause of the problem, but which strays too far from directly addressing and which carries a disproportionate cost with respect to the reported problem.

- 5 In such instances, the manufacturer may be seen as failing to understand the extent of the problem that actually needed to be resolved and the actual concern of the airline regarding the reported problem.

- 10 In some instances, individual airlines implement their own remedies for non-safety related problems. In other instances, individual airlines may work with a specific supplier or work within a predefined group such as, for example a "Working Together Team" comprising airline representative and propulsion systems representatives, to resolve a problem. However, the remedies resulting from these processes may be unknown to other airlines experiencing the same problem and may result in unnecessary costs and delays for the manufacturer as well as the other airlines if the problem is
- 15 addressed anew. In addition, the "problem" reported by an airline may, in actuality, be a request for modification to an existing subsystem for which design and development resources are needed instead of problem-solving capacity.

- Such concerns may be experienced by a number of diverse industries, and possibly within a particular industry, where a complex system is involved. Thus there
- 20 exists a need for a system capable of identifying the customer-reported problems comprising the prevalent concerns of the customers and for which the customers would be most likely to implement a provided remedy. It would also be desirable for the system to be capable of prioritizing the reported problems such that the more urgent issues may be addressed first without unnecessary delay in addressing other less urgent issues. In
- 25 such instances, it may also be desirable for the scope of the problem, the expected cost of a remedy, and/or the implementation schedule for a remedy to be decided prior to the expending of resources in order to increase the likelihood of customer implementation of the remedy. Further, in determining a resolution to the problem, it would be desirable for the system to be able to account for knowledge of remedies to similar problems
- 30 developed by other customers and/or remedies to similar problems developed by other customers in conjunction with suppliers and/or vendors. Such a system should also

account for a customer's request to implement a modification to the product that requires the allocation of alternate resources of the manufacturer in order to address such a request.

5

## SUMMARY OF THE INVENTION

The above and other needs are met by the present invention which, in one embodiment, provides a method of collaboratively identifying, prioritizing and resolving issues affecting a series administered by an originating entity, more particularly, wherein the series comprises a plurality of similar complex systems and the method is implemented over a computer network through a central site in communication therewith. First, an issue is received at the central site from a first computer device adapted to be used by a customer in possession of a system in the series and/or a second computer device adapted to be used by the originating entity. In such instances, the issue comprises a problem or other concern with the series requiring resolution. In addition, comments corresponding to the issue are then received at the central site from the customer and/or the originating entity in response to the issue. The issue and/or the comments are posted on a discussion-capable electronic media accessible to the first and second computer devices, as well as a third computer device, over the computer network, wherein the electronic media is configured to have a plurality of issues and a plurality of comments posted thereon.

The third computer device further is adapted to be used by a committee comprised of a customer representative and an originating entity representative. The third computer device is also allowed access to the electronic media so as to allow the committee to separate the posted plurality of issues into rejected issues and action issues, at least partially based on the posted plurality of comments. The committee thereafter prioritizes the action issues so as to determine an order in which the action issues are addressed. Further, the committee is allowed to send a set of resolution directions for each action issue, via the third computer device, over the computer network to the customer via the first computer device and/or the originating entity via the second computer device. Following the sending of the set of resolution directions, a resolution proposal is received for each action issue over the computer network, wherein the resolution proposals are

accessible by the committee via the third computer device. The committee is then allowed, via the third computer device, to direct the implementation of the resolution proposal for each action issue over the computer network. Following implementation of the resolution proposal, the committee then directs closure of the action issue.

5           In some instances, the rejected issues may be stored for further monitoring and/or future reference. In addition, the set of resolution directions may further comprise an assignment of the action issue to the customer and/or the originating entity, a suggested cost of the implementation of the resolution proposal, and/or a criteria for designating the action issue as being resolved. Further, in a particular instance, the originating entity  
10       may comprise an aircraft manufacture of a series of aircraft, while the issue comprises a non-safety issue.

          Another advantageous aspect of the present invention comprises a system for implementing the associated method for issue identification, prioritization, and resolution as described herein. Such a system may be implemented in computer software, or a  
15       combination of computer software and hardware, having one or more processing portions for accomplishing an associated method according to other embodiments of the present invention. In a representative embodiment, an electronic bulletin board or other discussion-capable electronic media is initiated and developed on a central computer or computer device that is part of a larger computer network such as, for example, the  
20       Internet. Such a central computer or computer device may comprise, for example, a desktop personal computer, a laptop personal computer, a server, a router, a mainframe computer or like devices or combinations thereof capable of implementing the described functions as known to one skilled in the art. Once established on the central computer or computer device, the bulletin board (also referred to herein as a "discussion board") is  
25       accessible to a customer through a customer's computer and to an originating entity through an originating entity's computer, with each of the computers being an integral part of the computer network and communicable with the central computer or computer device through, for example, network communication lines.

          The discussion board may be used by the customer and/or the originating entity to  
30       report problems or other issues requiring resolution, with regard to the complex system produced by the originating entity, so as to obtain a remedy or resolution therefor. In

order to list or discuss technical issues regarding the complex system, the customer or the originating entity accesses the discussion board, via the respective computers, over the network communication lines that are in communication with the central computer or computer device. Generally associated with the discussion board on the central computer or computer device are a customer information module and a problem solution board. With this system, the customer and/or the originating entity are able to report and discuss problems with the complex system, wherein the reported problems and corresponding discussion are evaluated by a steering committee via a steering committee's computer in communication with the central computer or computer device through the network communication line.

The steering committee may comprise a customer representative and an originating entity representative, wherein the steering committee monitors the discussion board so as to separate the reported issues into rejected issues and action issues. The action issues are prioritized and further posted on a problem solution board along with resolution directions therefor. The customer and the originating entity may also be in communication with the problem solution board so as to be able to monitor the action issues posted thereon by the steering committee. The steering committee may also post a set of resolution directions for each action issue on the problem solution board. The resolution directions may include, for example, assigning the task of investigating the action issue and producing a resolution proposal to the customer and/or the originating entity. The resolution directions may also include a suggested cost or cost limit for the implementation of a resolution proposal as well as the parameters needing to be fulfilled in order to designate the action issue as being resolved. Upon developing a resolution proposal, the responsible party posts the resolution proposal on the problem solution board via the network communication lines, wherein implementation of the resolution proposal is then directed by the steering committee. Upon completion of the implementation of the resolution proposal, the action issue is directed to be closed by the steering committee.

These elements, alone or in combination, are capable of implementing the associated method of identifying, prioritizing, and resolving issues according to embodiments of the present invention. The customer information module, the discussion

board, and the problem solution board are generally implemented in computer software, though the system may also, in some instances, be implemented by a combination of software and hardware, for example, where the system encompasses remote computers, displays, or the like. Further, the customer information module, the discussion board, and  
5 problem solution board may produce databases that are generally stored in, for instance, a memory device incorporated within or otherwise associated with the central computer or computer device. In addition, the central computer may, for example, at least partially include or be disposed in communication with a router, server, switch, or the like for communicating with the customer's computer, the originating entity's computer, and the  
10 steering committee's computer, but may also be configured to comprise at least a portion of one of the computers in communication therewith. These elements thus form a system for implementing the associated method according to embodiments of the present invention.

Thus, embodiments of the present invention provide a system capable of  
15 identifying customer-reported problems comprising the prevalent concerns of the customers and for which the customers would be most likely to implement a manufacturer-provided remedy. According to embodiments of the invention, the system is also capable of prioritizing the reported problems such that the more urgent issues are addressed first without unnecessary delay in addressing other less urgent issues. Further,  
20 the scope of the problem, the expected cost of remedy and/or the implementation schedule for a remedy is decided prior to the expending of resources and thereby increases the likelihood of customer implementation of the remedy. In addition, the system is capable of accounting for knowledge of remedies for similar problems developed by other customers and/or remedies to similar problems developed by  
25 customers in conjunction with suppliers and/or vendors. Still further, embodiments of the present invention also account for a customer's request to implement a modification to the product that may require the allocation of alternate manufacturer resources in order to address. Thus, a method and system for identifying, prioritizing, and resolving issues according to embodiments of the present invention provides significant advantages as  
30 detailed herein.

## BRIEF DESCRIPTION OF THE DRAWINGS

Some of the advantages of the present invention having been stated, others will appear as the description proceeds, when considered in conjunction with the accompanying drawings, which are not necessarily drawn to scale, in which:

5       **FIG. 1** is a schematic representation of an issue identification, prioritization, and resolution system according to one embodiment of the present invention.

**FIG. 2** is a schematic representation of a method of identifying, prioritizing, and resolving issues according to one embodiment of the present invention showing the identification and prioritization of issues.

10       **FIG. 3** is a schematic representation of a method of identifying, prioritizing, and resolving issues according to one embodiment of the present invention showing the investigation of identified and prioritized issues.

**FIG. 4** is a schematic representation of a method of identifying, prioritizing, and resolving issues according to one embodiment of the present invention showing the  
15       resolution of identified and prioritized issues.

**FIGS. 5-10** are schematic representations of an Internet-implemented example of an issue identification, prioritization, and resolution system according to one embodiment of the present invention

## 20       DETAILED DESCRIPTION OF THE INVENTION

      The present invention now will be described more fully hereinafter with reference to the accompanying drawings, in which preferred embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these  
25       embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout.

**FIG. 1** is a schematic representation of a collaborative system for issue identification, prioritization, and resolution operating over a computer network according  
30       to one embodiment of the present invention and is representative of a system capable of implementing a method of identifying, prioritizing, and resolving issues in accordance



with further embodiments of the present invention. The issue identification, prioritization, and resolution (IPR) system **120** is initiated and developed on a central computer or other computer device **110** wherein the central computer or other computer device **110** is a part of a larger computer network **100** such as, for example, the Internet.

5 Such a central computer or a computer device **110**, referred to herein as “central computer **110**” for convenience and brevity, may comprise, for example, a desktop personal computer, a laptop personal computer, a server, a router, a mainframe computer, or like devices or combinations thereof capable of implementing the functions and methods described herein as known to one skilled in the art.

10 Once established on the central computer **110**, the system **120** is accessible to a customer **130** through a customer’s computer **140** and to an originating entity **150** through an originating entity’s computer **160**, each of the computers **140**, **160** being an integral part of the computer network **100** and communicable with the central computer **110** through, for example, network communication lines **170**. Note that, while a simple  
15 schematic of several computers communicable over a computer network is presented herein, it is understood that this concept is representative of communication through an Internet site on, for example, the World Wide Web, and may involve many different computers and associated equipment, wherein the concept of communication via the Internet is known to one skilled in the art. Also note that, in some embodiments, the  
20 customer **130** and/or the originating entity **150** may utilize the system **120** in whole or in part, by telephone communication through, for example, an attended or automated call center in accordance with the spirit and scope of the present invention, wherein such a configuration is also known to one skilled in the art.

In order to establish the issue IPR system **120** such as, for example, by  
25 establishing one or more issues to be examined so as to publicize the issues affecting the complex systems produced by the originating entity, a customer **130** accesses the central computer **110** via the customer’s computer **140** over the network communication lines **170**. Generally associated with the system **120** on the central computer **110** are a customer information module **180**, a discussion board **190**, and problem solution board  
30 **200**. The customer **130** registers with the customer information module **180** via the network communication lines **170** such that the nature of the customer’s holdings of

complex systems produced by the originating entity **150** are known, particularly to the originating entity **150**. Further associated with the system **120** is a steering committee's computer **210** that is usable by a steering committee **220**, wherein the steering committee's computer **210** is communicable with the central computer **110** through network communication lines **170**. The outcome of the process administered by the system **120** requires reporting and/or discussion of problems or other issues **230** with respect to the complex system produced by the originating entity **150** and subsequently results in the issuance of a solution package **240** in response to the reported issue from the originating entity **150** to the customer **130**.

Note that the customer's computer **140**, the originating entity's computer **160**, and the steering committee's computer **210** may each generally comprise any computer device or terminal configured to be communicable with the central computer **110** over the computer network **100**, wherein, according to the description of the steering committee **220** used herein, a single computer device or terminal may, in some instances, comprise one or more of the computer elements. For example, a single computer device or terminal may comprise both the customer's computer **140** and the steering committee's computer **210** in instances where the customer **130** may be responsible for communications on behalf of the steering committee **220**. In other instances, a single computer device or terminal may comprise both the originating entity's computer **160** and the steering committee's computer **210** where the originating entity **150** is responsible for communications on behalf of the steering committee **220**.

The issue IPR system **120**, including the customer information module **180**, the discussion board **190**, and the problem solution board **200**, is generally implemented in computer software, though the system **120** may also, in some cases, be implemented in a combination of software and hardware. The information gathered through the customer information module **180** is generally stored in, for example, one or more databases in a memory device incorporated within or otherwise associated with the central computer **110**. In some instances, for example, elements of the system **120** may include or be disposed in communication with a router, a server, a switch or the like, for appropriately administering the communications between the customer **130**, the originating entity **150**, and the steering committee **220** as detailed herein. In addition, the discussion board **190**

and/or the problem solution board **200** may comprise, for instance, a display or other mechanism for presenting text, graphics, audio, or the like to inform the customer **130** and/or the originating entity **150** of any relevant information pertaining to a reported problem or issue, a corresponding resolution proposal, and/or other information

5 associated with the resolution of an issue through the issue IPR system **120**. For example, the discussion board **190** and/or the problem solution board **200** may comprise an electronic bulletin board and/or other discussion-capable electronic media or the like such as, for instance, an “instant message” type system or a “chat board,” that is initiated and developed on a central computer or computer device that is part of a larger computer  
10 network. Generally, these elements comprise a system, implemented in computer software or a combination of software and hardware, having one or more processing portions capable of executing embodiments of a method for identifying, prioritizing, and resolving issues according to the present invention. Thus, embodiments of such method according to the present invention may be implemented by one or more corresponding  
15 processing portions of an associated system, wherein each processing portion may comprise a software component, or both a software and hardware component, capable of implementing one or more of the specified functions. Accordingly, the operation of the issue IPR system **120** and its associated elements may be more particularly illustrated from the description of an associated method corresponding to one embodiment of the  
20 present invention.

**FIGS. 2, 3, and 4** are schematic representations of a method of identifying, prioritizing, and resolving issues according to one embodiment of the present invention. As detailed herein, the described method may allude to a representative example involving the airline industry where the customer **130** is an airline having a particular  
25 aircraft in its fleet and the manufacturer **150** is the manufacturer of that aircraft. However, it would be understood that the present invention is not limited to aircraft, but may include and be applicable to a variety of industries such as, for example, military systems, railroads, power generation systems, or to organizations such as the military and business corporations, wherein a diversified customer base is able to benefit from customer  
30 consensus on issues of particular importance as well as from a forum for various customers to discuss and resolve issues. Note that the present invention may also be

applicable within a particular organization where the “customer” may be a particular subgroup of the organization and the “manufacturer” comprises the administrator of the subgroups within the organization. Thus, the examples presented herein are not intended to limit the applicability of the embodiments of the present invention, but to illustrate possible applications consistent with the spirit and scope of the present invention.

As shown in FIG. 2, a manufacturer 150 producing a complex system and a customer 130 in possession of the complex system are able to raise issues and/or discuss the same 230 on an electronic discussion board 190 established as part of an issue IPR system 120 on a central computer 110 within a computer network 100. Note that the customer 130 may, in actuality, comprise a plurality of customers, wherein, for example, a customer may represent an airline within a plurality of airlines utilizing a manufacturer’s aircraft within its fleet. Accordingly, the issues which may be posted and discussed on the description board 190 may be items determined to have a significant impact to the fleet of a particular airline or an item identified by the manufacturer as having a significant impact on the overall fleet of a particular model of aircraft as determined by the manufacturer’s access to similar aircraft across many different airlines. The determined impact may include, for example, the relative impact on the customer with respect to all subsystems affected by the issue as well as the straight economic impact to the customer. Once an issue is posted on the discussion board 190, all customers may review the posted issues to assess the impact of each issue upon their fleet. In addition, the customer 130 and/or the manufacturer 150 posting issues as well as providing comments on the same, may also provide an assessment of the relative level of impact upon the fleet. Further, should a customer 130 and/or the manufacturer 150 have previously encountered the reported issue, details of the resolution of the issue may be provided so as to be accessible to others. The system 120 may also be configured such that questions or other discussion may be exchanged between the customer 130 and the manufacturer 150 integrally with or independent of the discussion board 190.

As further shown in FIG. 2, to facilitate administration of the system 120, the manufacturer 150 appoints a manufacturer representative 155 and the customer 130 appoints a customer representative 135 to a steering committee 220. Thus, the steering committee 220 may comprise a manufacturer representative 155 and one or more

customer representatives **135**. In some instances, particularly within the aircraft industry, the manufacturer representative **155** may comprise, for example, the fleet support chief in charge of a particular model of aircraft. Within the steering committee **220**, a chairperson or co-chairpersons may be appointed, wherein the chair position comprises at least the  
5 manufacturer representative and, in some instances, may also comprise a customer representative **135**. The chairperson or co-chairpersons generally administer the functions of the steering committee and the duties thereof will be described herein in conjunction with the functions of the steering committee **220**, though it will be understood that the functions of the chairperson or co-chairpersons may be described  
10 differently in an administrative capacity from the general functions of the steering committee **220**.

Generally, the steering committee **220** monitors, evaluates, and prioritizes issues **250** posted on the discussion board **190** where, for example, the postings may be monitored for completeness, adherence to form, and understandability. In addition, the  
15 steering committee **220** may solicit comments from individual customers, implement discussion to determine the issues requiring action and the relative priority thereof, implement discussion as to a projected cost of remedy and an appropriate schedule for implementing that remedy, and administer the status of each issue posted on the discussion board **190**. For example, the issues that are not eventually deemed an action  
20 issue may be rejected and deleted from the discussion board **190**. However, in some instances, the rejected issues may be retained for further monitoring and/or as future reference. Issues not meeting the previous criteria for retention in some form are considered rejected issues that are closed **260** by the steering committee **220** and not further considered.

25 As shown in **FIG. 3**, once the steering committee **220** administers the selection process for action issues, the steering committee **220** may further discuss the action issues with the customer **130** and/or the manufacturer **150** in order to obtain confirmation of the issues selected for action. Further, the steering committee **220** may consider input from the customer **130** and/or the manufacturer **150** as to the appropriate party to be assigned  
30 to investigate a remedy to the reported issue. More particularly, the action issue may be assigned to the customer **130** and/or the manufacturer **150** for the respective party to

pursue a remedy therefor. The steering committee **220** may further discuss with the customer **130** and/or the manufacturer **150** the criteria under which the action issue is to be deemed closed where, for example, a reported issue may not be closed until a full implementation of a remedy is obtained or until the responsible party has produced a report or study providing disposition of the reported issue.

Once the discussion amongst the steering committee **220**, the customer **130**, and the manufacturer **150** is completed, the steering committee **220** may provide a number of administrative functions which may include, for example, assessing the final choices of action issues, prioritizing those action issues, and determining whether the customer **130** and/or the manufacturer **150** is the appropriate party to perform a resolution investigation. The steering committee **220** may also determine a projected cost or cost limit for the implementation of a remedy along with an action schedule over which the investigation and implementation of a remedy is to take place. After determining the closure criteria for the action issue, the steering committee obtains a commitment from the customer **130** to incorporate the remedy under the projected conditions, including such parameters as cost, time, and closure criteria.

As further shown in **FIG. 3**, once the steering committee **220** completes the necessary administrative tasks for each action issue, the guidelines or directions for issue resolution **270** are forwarded to the customer **130** and/or the manufacturer **150**, depending upon the determination of issue ownership by the steering committee **220**. The appropriate party then initiates an issue resolution investigation **280** according to the provided guidelines. In the airline industry, for example, an action issue assigned to the customer **130** may be resolved in various ways. For instance, under a “Best Practices” approach, the airlines may discuss, among themselves, prior occurrences of the same or similar problem reported in the action issue and the steps previously taken to resolve the situation. Thus, a customer-based remedy may be provided. Further, the customer **130** may directly contact the supplier of “buyer furnished equipment” (BFE) comprising the particular subsystem reported as being a problem in the action issue, to work therewith to determine a remedy to the issue. In some instances, particularly with engines/propulsion systems which are generally provided by an outside vendor, the airlines may use “Working Together Teams” to assimilate the aircraft with the propulsion system. In

these instances, the customer **130** may utilize the Working Together Teams to resolve the action issue.

If the action issue is assigned to the manufacturer **150**, however, the manufacturer **150** may implement an internal problem-solving process along the guidelines provided by the steering committee **220** to conduct the appropriate investigation for the action issue. In such instances, the manufacturer **150** may require communication with the customer **130** for additional information, to validate a proposed remedy, and/or to request the customer **130** to provide access to an aircraft to support the testing of any proposed remedy by the manufacturer **150**. In other instances, the action issue may be a request from an airline for a modification to an existing subsystem, rather than a problem requiring a remedy. In these instances, the manufacturer **150** may have a dedicated department for addressing such concerns and, thus, an action issue involving a modification to a specific subsystem may be assigned thereto.

As shown in **FIG. 4**, once the customer **130** and/or the manufacturer **150** completes the issue resolution investigation **280**, the responsible party reports the results of the issue resolution investigation **290** to the steering committee **220**. The report may include, for example, a proposed remedy for the action issue, an implementation proposal and time frame, and/or an assessment regarding closure of the issue. The steering committee **220** then may direct the implementation of the remedy for the action issue **300** via a service bulletin, the computer network **100**, or other agreed method of directing implementation with regard to the customer **130**. If consensus as to the closure of the action issue is reached, the steering committee then deems the issue resolved and closes the action issue **310**.

**FIGS. 5-10** illustrate an Internet-implemented example of an issue identification, prioritization, and resolution system according to one embodiment of the present invention. **FIG. 5** illustrates a posting of an issue received from a customer on the discussion board, wherein the customer also assesses the relative impact of the issue as shown in **FIG. 6**. In response to the posting of the issue, the customer may receive one or more responses from the originating entity and/or other customers on the discussion board. **FIG. 7** illustrates an example of a response detailing another customer's experience with the same issue and the relative impact thereof, while **FIG. 8** illustrates

still another customer's experience with the same issue and the customer-implemented procedure to resolve the issue. **FIG. 9** illustrates the posting customer's assessment of the relevant discussion on the discussion board as well as the request for a permanent solution to the issue. **FIG. 10** further illustrates the evaluation and response of the steering committee to the request from the posting customer, wherein the steering committee assigns ownership of the issue to the originating entity and details the relevant parameters affecting the solution. It will be understood, however, that the examples presented herein are for the purposes of illustration and that actual issues may vary considerably in, for example, extent of discussion, complexity of relative impact evaluation, and issue resolution parameters in accordance with the spirit and scope of the present invention.

Thus, embodiments of an issue identification, prioritization, and resolution system according to the present invention provide an improved system for issue resolution, wherein the customer and the originating entity cooperate to agree on actionable issues, the priority of these issues, and the appropriate party and time frame in which a remedy for the action issue is to be provided. In this manner, the customers are capable of providing input into the time frame and the cost of a remedy, as well as input into the operating realities of their business. Such a concept is applicable to a wide variety of systems, particularly where a complex system is involved, and increases the likelihood of customer implementation of the resulting remedy since consensus among the parties is obtained prior to implementing an investigation for a remedy. Embodiments of the system further provide an issue resolution process capable of drawing on resources available to the customer as well as the manufacturer and enables enhanced communication therebetween due to implementation over a computer network accessible by remote computer devices. Further, embodiments of the system are capable of generating cost savings for both parties since time, manpower, and other resources are not wasted on issues which do not present a significant problem for the customer. In addition, the customer may also be able to realize other cost savings since the scope of the remedy and the cost thereof may be discussed and determined before resources are expended for an issue resolution investigation. Embodiments of such a system are also beneficial to the manufacturer in that the customers provide a commitment to implement



the remedy prior to the addressing of the action issue. Further, the enhanced communication between the manufacturer and the customers resulting from a system according to embodiments of the present invention may facilitate improved relations therebetween and, thus, may provide a non-tangible benefit to both parties. Thus,  
5   embodiments of the present invention provide distinct advantages in the identifying, prioritizing, and resolving of issues than is known in the art.

Many modifications and other embodiments of the invention will come to mind to one skilled in the art to which this invention pertains having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Therefore, it is to be  
10   understood that the invention is not to be limited to the specific embodiments disclosed and that modifications and other embodiments are intended to be included within the scope of the appended claims. Although specific terms are employed herein, they are used in a generic and descriptive sense only and not for purposes of limitation.

20  
30  
40  
50  
60  
70  
80  
90  
100  
110  
120  
130  
140  
150  
160  
170  
180  
190  
200  
210  
220  
230  
240  
250  
260  
270  
280  
290  
300  
310  
320  
330  
340  
350  
360  
370  
380  
390  
400  
410  
420  
430  
440  
450  
460  
470  
480  
490  
500  
510  
520  
530  
540  
550  
560  
570  
580  
590  
600  
610  
620  
630  
640  
650  
660  
670  
680  
690  
700  
710  
720  
730  
740  
750  
760  
770  
780  
790  
800  
810  
820  
830  
840  
850  
860  
870  
880  
890  
900  
910  
920  
930  
940  
950  
960  
970  
980  
990